

Divide fractions by integers (2)



1

$$\frac{4}{5} \div 2 \quad \frac{4}{5} \div 3$$

a) Write two things that are the same about the calculations.

e.g. They are both divisions.
They both contain $\frac{4}{5}$

b) Write one thing that is different about the calculations.

What the fraction is being divided by.

c) Draw a diagram to help you work out the answer to $\frac{4}{5} \div 2$

$$\frac{4}{5} \div 2 = \frac{2}{5}$$



d) Draw a diagram to help you work out the answer to $\frac{4}{5} \div 3$

$$\frac{4}{5} \div 3 = \frac{4}{15}$$

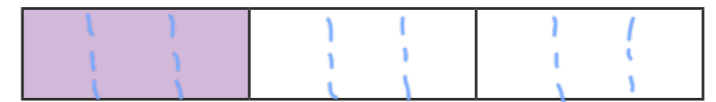
2

Complete the divisions using the diagrams to help you.

a) $\frac{1}{3} \div 2 = \frac{1}{6}$



b) $\frac{1}{3} \div 3 = \frac{1}{9}$

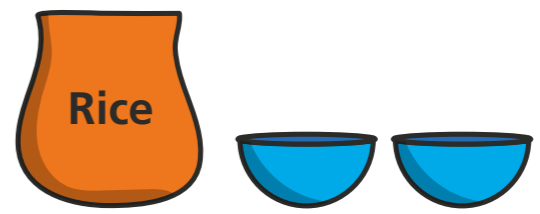


c) $\frac{2}{3} \div 3 = \frac{2}{9}$



3

$\frac{3}{4}$ of a kilogram of rice is divided equally between two bowls.



How much rice is in each bowl?

$$\frac{3}{8} \text{ kg}$$

4 Work out the divisions.

a) $\frac{1}{5} \div 7 = \frac{1}{35}$

f) $\frac{5}{72} = \frac{5}{6} \div 12$

b) $\frac{1}{18} = \frac{1}{6} \div 3$

g) $\frac{8}{3} \div 7 = \frac{8}{21}$

c) $\frac{1}{4} \div 9 = \frac{1}{36}$

h) $\frac{19}{100} = \frac{19}{20} \div 5$

d) $\frac{1}{42} = \frac{1}{7} \div 6$

i) $\frac{1}{100} \div 25 = \frac{1}{2,500}$

e) $\frac{4}{9} \div 7 = \frac{4}{63}$

j) $\frac{9}{200} = \frac{45}{50} \div 20$

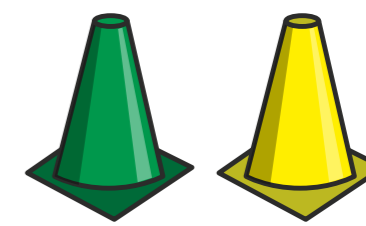
5 Write <, > or = to complete each statement.

a) $\frac{1}{3} \div 5$ $\frac{1}{5} \div 3$

b) $\frac{1}{3} \div 3$ $\frac{1}{5} \div 5$

c) $\frac{3}{5} \div 5$ $\frac{3}{5} \div 3$

6 There are some cones in the PE shed.
Classes 1, 2 and 3 share them equally.



- Class 1 put theirs into 4 equal piles.
- Class 2 put theirs into 5 equal piles.
- Class 3 put theirs into 11 equal piles.

What fraction of the whole number of cones is in each pile?

	Fraction in each pile
Class 1	$\frac{1}{12}$
Class 2	$\frac{1}{15}$
Class 3	$\frac{1}{33}$

7 a) Which of these statements are true? Tick your answers.

$\frac{1}{2} \div 2$ is equal to $\frac{1}{2} \times \frac{1}{2}$

$\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4}$

$\frac{1}{2} \div 3 = \frac{1}{2} \times \frac{1}{3}$

$\frac{1}{2} \div 5 = \frac{1}{2} \times \frac{1}{5}$

b) What do you notice?
Is it only true for halves?
Does it work for non-unit fractions?
Talk to a partner.